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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,308	03/01/2002	Evren Eryurek	30203/38232	2061
4743 7590 04/09/2007 MARSHALL, GERSTEIN & BORUN LLP 233 S. WACKER DRIVE, SUITE 6300 SEARS TOWER CHICAGO, IL 60606			EXAMINER CHANG, JUNGWON	
			ART UNIT 2154	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			04/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.		Applicant(s)	
	10/087,308		ERYUREK ET AL.	
	Examiner		Art Unit	
	Jungwon Chang		2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 18-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 18-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Action is in response to RCE filed on 1/26/07. Claim 17 has been canceled. Claims 1-16 and 18-55 are presented for examination.

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/26/07 has been entered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-6, 8-16, 18-21, 23-44, and 46-55** are rejected under 35 U.S.C. 103 (a) as being obvious over Spriggs et al. (US 6,421,571 B1) (hereinafter Spriggs) in view of Shimizu et al. (US 6,665,635 B2), hereinafter Shimizu, further in view of Thibault et al. (US 6,799,195), hereinafter Thibault.

5. As for claim 1, Spriggs discloses a method of collecting and using data within a process plant, comprising:

collecting data from a plurality of data sources within the process plant, wherein the plurality of data sources includes a service application that is implemented by a service provider to the process plant (Figs. 1 and 3; col. 2, lines 12-39);

storing the collected data in a database (database module 80, Fig. 1; col. 2, line 45 – col. 3, line 5);

making the stored data accessible to one or more process control applications or maintenance applications within the process plant (col. 2, line 45 – col. 3, line 5); and

making the stored data accessible to the service application (col. 6, line 49 – col. 7, line 25).

6. Although Spriggs teaches providing data sources including service applications from an outside service provider (col. 6, line 62 – col. 7, line 15), Spriggs does not *explicitly* disclose that the outside service providers may remotely *implement* the service application. Shimizu teaches using an outside service provider (maintenance service provider, fig. 1) for remotely implementing a service application (maintenance tool, fig. 1) for collecting data from a plurality of sources within a plant (fig. 4; col. 1, line 55 – col. 2, line 2; col. 3, line 50 – col. 4, line 38). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Spriggs by using an outside service provider for implementing a service application in order to outside service provider who

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is at a remote location spaced far from the plant to remotely execute the service application, thus enabling improvement in quality of maintenance services (Shimizu; col. 1, line 55 – col. 2, line 2; col. 4, lines 28-38).

Thibault also discloses using an outside service provider for remotely implementing a service application for collecting data from a plurality of sources within a plant (figs. 1-2; col. 1, lines 38-65, “remote access and control of processes is desirable for a number of purposes”). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Spriggs by using an outside service provider for implementing a service application in order to outside service provider to remote access and monitor the plant processes outside from the plant (Thibault, col. 1, lines 59-65).

7. As for claim 2, Spriggs discloses the method of claim 1, wherein the step of collecting data includes collecting data from a process control data source (col. 6, line 62 – col. 7, line 5).

8. As for claim 3, Spriggs discloses the method of claim 1, wherein the step of collecting data includes collecting data from a field device maintenance source (col. 2, lines 12-26; col. 6, line 62 – col. 7, line 5).

9. As for claim 4, Spriggs discloses the method of claim 1, wherein the step of collecting data includes collecting data from a process model (col. 7, lines -26).

10. As for claim 5, Spriggs discloses the method of claim 1, wherein the step of collecting data includes collecting data from a business application (col. 7, lines -26).

11. As for claim 6, Spriggs discloses the method of claim 1, wherein the step of collecting data includes collecting data from a service application that is an optimization application (col. 2, lines 12-26; col. 7, lines -26).

12. As for claim 8, Spriggs discloses the method of claim 1, wherein the step of collecting data includes collecting data from a service application that is a process performance monitoring application (col. 2, lines 12-26; col. 7, lines -26).

13. As for claim 9, Spriggs discloses the method of claim 1, wherein the step of collecting data includes collecting data from a service application that is a condition monitoring application (col. 2, lines 12-26; col. 7, lines -26).

14. As for claim 10, Spriggs discloses the method of claim 1, wherein the step of collecting data includes collecting data from a service application that is a reliability monitoring application (col. 2, lines 12-26; col. 7, lines -26).

15. As for claim 11, Spriggs discloses the method of claim 1, wherein the step of collecting data includes collecting data from a service application that is an electrical equipment monitoring application (col. 2, lines 12-26; col. 7, lines -26).

16. As for claim 12, Spriggs discloses the method of claim 1, wherein the step of collecting data includes collecting data from a service application that is device performance monitoring application (col. 2, lines 12-26; col. 7, lines -26).

17. As for claim 13, Spriggs discloses the method of claim 1 wherein the step of collecting data includes collecting data from a data source that is intermittently communicatively connected to the process plant (portable data collectors; col. 21, lines 64-67).

18. As for claim 14, Spriggs discloses the method of claim 13, wherein the service application data source is intermittently communicatively connected to the process plant (col. 21, lines 64-67).

19. As for claim 15, Spriggs discloses the method of claim 1, wherein the step of storing includes storing the collected data in a single database (database module 80, Fig. 1).

20. As for claim 16, it is rejected for the same reasons set forth in claim 1 above. In addition, Spriggs discloses a method of performing operations for a process plant having a controller, a plurality of devices and a first computer that implements a first application that is a process control application or a maintenance application used by

plant personnel, the method comprising:

collecting first data from the first application as used in the process plant (col. 2, lines 45-56; col. 6, line 49 – col. 7, line 25);

storing the first data in a memory (database module 80, Fig. 1; col. 2, line 45 – col. 3, line 5);

collecting second data from a second application implemented by a service provider associated with the process plant (col. 2, lines 45-56; col. 21, lines 64-67);

providing the second data to the memory storing the second data in the memory (col. 2, line 45 – col. 3, line 5); and

making the second data available from the memory to the first application (col. 6, line 49 – col. 7, line 25; col. 21, lines 64-67).

making the first data available from the memory to the second application (col. 6, line 49 – col. 7, line 25).

21. As for claim 18, Spriggs discloses the method of claim 16, wherein the step of collecting first data includes collecting data from a process controller data source (col. 6, line 62 – col. 7, line 5).

22. As for claim 19, Spriggs discloses the method of claim 16, wherein the step of collecting first data includes collecting data from a process model data source (col. 7, lines -26).

23. As for claim 20, Spriggs discloses the method of claim 16, wherein the step of collecting first data includes collecting data from a business application (col. 7, lines -26).

24. As for claim 21, Spriggs discloses the method of claim 16, wherein the step of collecting second data includes collecting data from a second application that is an optimization application (col. 2, lines 12-26; col. 7, lines -26).

25. As for claim 23, Spriggs discloses the method of claim 16, wherein the step of collecting second data includes collecting data from a second application that is a performance monitoring application (col. 2, lines 12-26; col. 7, lines -26).

26. As for claim 24, Spriggs discloses the method of claim 16, wherein the step of collecting second data includes collecting data from a second application that is device performance monitoring application located within a device (col. 2, lines 12-26; col. 7, lines -26).

27. As for claim 25, Spriggs discloses the method of claim 16, wherein the step of collecting second data includes collecting data from a second application that is intermittently communicatively connected to the memory (portable data collectors; col. 21, lines 64-67).

28. As for claim 26, Spriggs discloses the method of claim 16, wherein the steps of storing the first and the second data in the memory includes storing the first and second data in a common memory at a single location (database module 80, Fig. 1).

29. As for claim 27, it is rejected for the same reasons set forth in claim 1 above. In addition, Spriggs discloses a data communication system within a process plant, comprising:

- a first communication network associated with the process plant that uses a first communication protocol (col. 7, lines 6-44);

- a first application adapted to communicate via the first communication network (col. 5, line 66 – col. 7, line 10; col. 6, line 49 – col. 7, line 25);

- a second communication network associated with the process plant that uses a second communication protocol (col. 7, lines 6-44);

- a second application adapted to communicate via the second communication network (col. 5, line 66 – col. 7, line 10; col. 6, line 49 – col. 7, line 25);

- a database (database module 80, Fig. 1) communicatively coupled to the first communication network and to the second communication network, said database adapted to receive first data from the first application and second data from the second application, to store the first data and the second data and to provide the first data to the second application via the second communication network and to provide the second data to the first application via the first communication network (col. 2, line 45 – col. 3, line 15; col. 6, line 49 – col. 7, line 25).

30. As for claim 28, Spriggs discloses the data communication system of claim 27, wherein the first application or the second application is adapted to be intermittently connected to the first or the second communication network (portable data collectors; col. 21, lines 64-67).

31. As for claim 29, Spriggs discloses the data communication system of claim 27, wherein the first application is a process control application and the second application is a process performance application (col. 2, lines 12-26; col. 6, line 49 – col. 7, line 25).

32. As for claim 30, Spriggs discloses the data communication system of claim 27, wherein the first application is a device maintenance application and the second application is an optimization application (col. 2, lines 12-26; col. 6, line 49 – col. 7, line 25).

33. As for claim 31, Spriggs discloses the data communication system of claim 27, wherein the first application is a process control application and the second application is an optimization application (col. 2, lines 12-26; col. 6, line 49 – col. 7, line 25).

34. As for claim 32, Spriggs discloses the data communication system of claim 27, wherein the first application is a process control application and the second application is a business application (col. 2, lines 12-26; col. 6, line 49 – col. 7, line 25).

35. As for claim 33, Spriggs discloses the data communication system of claim 27, wherein the first application is a process performance monitoring application and the second application is a device maintenance application (col. 2, lines 12-26; col. 6, line 49 – col. 7, line 25).

36. As for claim 34, Spriggs discloses the data communication system of claim 27, wherein the first application is a process control application and the second application is a power equipment monitoring application (col. 2, lines 12-26; col. 6, line 49 – col. 7, line 25).

37. As for claim 35, Spriggs discloses the data communication system of claim 27, wherein the first application is a process control application and the second application is a rotational equipment analysis application (col. 2, lines 12-26; col. 6, line 49 – col. 7, line 25).

38. As for claim 36, Spriggs discloses the data communication system of claim 27, wherein the first application is a process control application and the second application is a device diagnostic application (col. 2, lines 12-26; col. 6, line 49 – col. 7, line 25).

39. As for claim 37, it is rejected for the same reasons set forth in claim 1 above. In addition, Spriggs discloses a data communication system within a process plant,

comprising:

a database adapted to store a plurality of different types of data (database module 80, Fig. 1; col. 2, line 45 – col. 3, line 5); and

a plurality of applications communicatively coupled to the database via different communication networks, the plurality of applications including two or more of a process control application, a process performance monitoring application, a process device monitoring application and a business application (col. 2, lines 12-26; col. 6, line 49 – col. 7, line 25; Fig. 3);

wherein at least one of the plurality of applications is a service application, wherein each of the plurality of applications are adapted to send data to the database to be stored, and wherein the database is adapted to provide to the service application data from the database that was sent to the database via another one of the applications (col. 2, line 45 – col. 3, line 15; col. 6, line 49 – col. 7, line 25).

40. As for claim 38, Spriggs discloses the data communication system of claim 37, wherein two or more of the plurality of applications are adapted to access data from the database sent to the database via different ones of the applications (col. 2, line 45 – col. 3, line 15; col. 6, line 49 – col. 7, line 25).

41. As for claim 39, Spriggs discloses the data communication system of claim 37, further including the plurality of communication networks coupled to the database and

wherein the each of the plurality of applications communicates with the database via a different one of the plurality of communication networks (col. 8, lines 19-57).

42. As for claim 40, Spriggs discloses the data communication system of claim 37, wherein one of the plurality of applications is an optimization application (col. 2, lines 12-26; col. 7, lines -26).

43. As for claim 41, Spriggs discloses the data communication system of claim 37, wherein one of the plurality of applications is a process performance monitoring application (col. 2, lines 12-26; col. 7, lines -26).

44. As for claim 42, Spriggs discloses the data communication system of claim 37, wherein one of the plurality of applications is a device performance monitoring application (col. 2, lines 12-26; col. 7, lines -26).

45. As for claim 43, Spriggs discloses the data communication system of claim 37, wherein one of the plurality of applications is a power equipment monitoring application (col. 2, lines 12-26; col. 7, lines -26).

46. As for claim 44, Spriggs discloses the data communication system of claim 37, wherein one of the plurality of applications is a rotational equipment analysis application (col. 2, lines 12-26; col. 7, lines -26).

47. As for claim 46, Spriggs discloses the data communication system of claim 37, wherein one of the plurality of applications is a reliability monitoring application (col. 2, lines 12-26; col. 7, lines -26).

48. As for claim 47, Spriggs discloses the data communication system of claim 37, wherein one of the plurality of applications is intermittently communicatively connected to database (portable data collectors; col. 21, lines 64-67).

49. As for claims 48-55, Spriggs inherently includes expressing the data in a descriptive language, because otherwise the data could not be displayed on a unified graphical user interface. However, Spriggs does not explicitly teach that the descriptive language may be XML. Thibault teaches using XML as a descriptive language for expressing data collected from data sources in a plant (col. 2, lines 41-44; col. 3, lines 14-34; col. 4, lines 57-65). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Spriggs by using XML in order to provide information on web-based (Thibault, col. 2, lines 41-44; col. 3, lines 14-34).

50. **Claims 7, 22 and 45** are rejected under 35 U.S.C. 103(a) as being unpatentable over Spriggs, Shimizu, Thibault, further in view of Hays et al. (US 5,855,791) (hereinafter Hays).

51. As for claims 7, 22 and 45, although Spriggs discloses that any of a variety of monitoring applications may be integrated with the system, Spriggs does not explicitly teach a corrosion monitoring application. Hays teaches the use of a corrosion monitoring application for controlling the performance of a cooling system (col. 4, line 66 – col. 5, line 3; col. 13, lines -28). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Spriggs by using a corrosion monitoring application in order to control the performance of a cooling system, as taught by Hays above.

52. Applicant's arguments with respect to claims 1-16 and 18-55 have been considered but are moot in view of the new ground(s) of rejection.


53. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jungwon Chang whose telephone number is 571-272-3960. The examiner can normally be reached on 9:30-6:00 (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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March 30, 2007


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